



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/780,874	02/19/2004	Hui-Huang Chang	3319-0122P	1959

2292 7590 10/24/2007  
BIRCH STEWART KOLASCH & BIRCH  
PO BOX 747  
FALLS CHURCH, VA 22040-0747

EXAMINER
----------

AGGARWAL, YOGESH K

ART UNIT	PAPER NUMBER
----------	--------------

2622

NOTIFICATION DATE	DELIVERY MODE
-------------------	---------------

10/24/2007

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

## Office Action Summary

**Application No.**

10/780,874

**Applicant(s)**

CHANG, HUI-HUANG

**Examiner**

Yogesh K. Aggarwal

**Art Unit**

2622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 February 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
- Paper No(s)/Mail Date 05/24/2006

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date. \_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_

***Drawings***

1. Figures 1a-1c should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3, 5 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Toyoda et al. (US Patent # 4,420,773).

[Claims 1-3]

Toyoda teaches an electronic camera (figures 19-21), comprising a camera unit (camera unit 500 shown in figures 19, 20 and 21a), for generating and outputting image data (col. 21 lines 34-52) and a display module (monitor device 400), capable of receiving said image data using a transmission interface and displaying said image data (col. 22 lines 35-50); wherein, the display module is detachable from the camera unit (col. 21 lines 53-54, col. 22 lines 5-9) wherein said display module further comprises a command interface that includes a shutter release (button

Art Unit: 2622

431) for controlling said digital camera (col. 22 lines 5-9, col. 22 lines 35-60). Toyoda fails to teach in this embodiment if the camera is digital camera. However Toyoda teaches in figure 9 an image pick up unit 1a having an image pick up device 11 wherein the output terminals of the image pick up device 11 are connected to A/D converter 108 and the analog input signal is converted to digital signal to be stored into the storing unit 2 (col. 7 lines 11-25, figure 9).

Therefore taking the combined teachings of Toyoda's current embodiment (figures 19-21) and a previous embodiment (figure 9), it would be obvious to one skilled in the art at the time of the invention to have been motivated to have a digital camera in order to have digital images that are easier to manipulate and easier to distribute over electronic media (e.g., the Internet or e-mail). Digital image data may be stored, processed, and/or reproduced with ease. The relative ease of handling and processing the digital image data produced by digital cameras allows users to readily enlarge, reduce, or otherwise modify the digital image data to create any of a wide range of photographic effects and styles.

[Claims 5, 11]

Toyoda teaches wherein said transmission interface is wired via cable or wireless via radio waves (col. 23 lines 1-5, radio waves propagate wirelessly).

4. Claims 6, 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Toyoda et al. (US Patent # 4,420,773) in view of Voss et al. (US PG-PUB # 2004/0036791).

[Claim 6]

Toyoda fails to teach wherein said transmission interface is a USB. However Voss et al. teaches LCD 11 that interfaces to a digital still camera 10 via USB (Paragraph 42 and 45). Therefore taking the combined teachings of Toyoda and Voss, it would be obvious to one skilled in the art

Art Unit: 2622

at the time of the invention to have been motivated to have a transmission interface that is a USB since USB has the advantages of plug and play thereby enabling uninterrupted operation of the camera.

[Claim 15]

Toyoda fails to teach wherein said display module further comprises a power supply for providing electricity to said display module. However Voss teaches LCD 11 that has a housing 15 and provides a space or cavity in which a chemical battery 14 is disposed and used to power the LCD (Paragraphs 39 and 40). Therefore taking the combined teachings of Toyoda and Voss, it would be obvious to one skilled in the art at the time of the invention to have been motivated to have a power supply for providing electricity to said display module in order to have additional power available for powering the LCD and other components of the LCD thereby reducing the load on the camera's own battery making it last longer and take more pictures.

[Claim 16]

Toyoda fails to teach wherein said display module is powered by a power supply of the camera unit through the transmission interface. However Voss teaches a battery compartment 26 for housing batteries 27 (Paragraph 34) and a liquid crystal device just has electrical contacts 13a and no power supply of its own (Paragraph 39, also see paragraph 46) wherein it would be obvious to one skilled in the art that the power is being received from the camera since the LCD does not have a power supply of its own. The transmission interface is the electrical contacts 13a. Therefore taking the combined teachings of Toyoda and Voss, it would be obvious to one skilled in the art at the time of the invention to have been motivated to have a display module that is powered by a power supply of the camera unit through the transmission interface in order

Art Unit: 2622

to reduce the size of the LCD device thereby making it easy to carry when it is detached from the camera.

5. Claims 7-10 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Toyoda et al. (US Patent # 4,420,773) in view of Koplar (US-PGPUB # 2002/0112250).

[Claims 7-10, 12]

Toyoda fails to teach wherein said transmission interface is IEEE 1394, Ethernet, optical fiber, parallel port and infrared. However Koplar teaches hand held devices include cameras (Paragraph 38) that can communicate to an external device via IEEE 1394, Ethernet, optical fiber, parallel port and infrared (Paragraph 88). Therefore taking the combined teachings of Toyoda and Koplar, it would be obvious to one skilled in the art at the time of the invention to have been motivated to have a transmission interface that is IEEE 1394 having a guaranteed delivery features of a bus, Ethernet having a number of advantages of Ethernet services, including ease of use, cost effectiveness, flexibility, and wide range of service options, etc, optical fiber having advantages such as high capacity to carry data, parallel port that is faster than a serial port and infrared having line of sight advantages.

6. Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Toyoda et al. (US Patent # 4,420,773), Koplar (US PG-PUB # 2002/0112250) in view of Voss et al. (US PG-PUB # 2004/0036791).

[Claim 13]

Toyoda in view of Koplar fail to teach wherein said transmission interface is a Bluetooth interface. However Voss et al. teaches a LCD 11 that interfaces to a digital still camera 10 via Bluetooth (Paragraph 42 and 45). Therefore taking the combined teachings of Toyoda, Koplar

Art Unit: 2622

and Voss, it would be obvious to one skilled in the art at the time of the invention to have been motivated to have a transmission interface that is a Bluetooth interface since it has advantages that it is a short-distance, low-cost wireless communication technology using a Frequency-Hopping Spread Spectrum (FHSS) method to reduce the interference.

[Claim 14]

Toyoda teaches wherein said transmission interface is radio waves (col. 23 lines 1-5).

7. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Toyoda et al. (US Patent # 4,420,773), Ota (US PG PUB # 20020191974) and further in view of Kubo (US PG-PUB # 2003/0169357).

[Claim 4]

Toyoda fails to teach wherein said display device includes an adjuster for adjusting focus.

However Ota teaches a display device 30 (figure 2) that has a zoom button 33 that is located on the display device and controls the zoom of the camera unit 10 (Paragraphs 40 and 50).

Therefore taking the combined teachings of Toyoda and Ota, it would be obvious to one skilled in the art at the time of the invention to have been motivated to have a display device includes an adjuster for adjusting focus in order to have a button that can be easily reached by the operator with a high degree of reliability while the display is remote from the camera.

Toyoda in view of Ota fail to teach wherein zoom changes focus. However Kubo teaches a zoom lens that changes focusing distance of the lens included in the optical unit. The focusing control is done so as to maximize the contrast of an image obtained by imaging by the imaging device (Paragraphs 44-46).

Art Unit: 2622

Therefore taking the combined teachings of Toyoda, Ota and Kubo, it would be obvious to one skilled in the art at the time of the invention to have been motivated to have a zoom that changes focusing distance of the lens included in the optical unit in order to maximize the contrast of an image obtained by imaging by the imaging device thereby receiving a better quality image (Paragraphs 44-46).

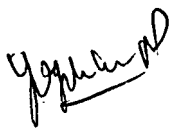
### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yogesh K. Aggarwal whose telephone number is (571) 272-7360. The examiner can normally be reached on M-F 9:00AM-5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lin Ye can be reached on (571)-272-7372. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

YKA





Application/Control Number: 10/780,874

Page 8

Art Unit: 2622

October 11, 2007